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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,027

03/24/2005

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EXAMINER

CHUI, MEI PING

ART UNIT

PAPER NUMBER

1616

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,027	Applicant(s) KITANO ET AL.	
	Examiner MEI-PING CHUI	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/11/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of Action

The Examiner acknowledges receipt of application number 10/529,027 filed on 03/24/2005. Accordingly, claims 1-10 are presented for examination on the merits for patentability.

Comment: claim 8 recites the viscosity unit “mPas”, which should be written as “mPa.s”. Applicant is required to correct the typographical error.

Claim Rejections - 35 USC § 112 second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) **Claims 1 and 4** are rejected 35 U.S.C. 112, second paragraph, because a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claims

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do not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c).

In the present instance, **claim 1** recites the broad range of the aqueous base comprising water, which is present at least 30 % by weight. However, claim 1 also recites a narrower range of the aqueous base comprising water, which is present preferably at least 40 %, and most preferably at least 50 %.

Similarly, **claim 4** recites a broad range of the weight ratio of cleaning surfactant to sodium chloride is 30:1 or more. However, claim 4 also recites a narrower range of the weight ratio is 300:1 or more, and more preferably, the weight ratio is 600:1 or more.

Claims 2 and 5-10 are rejected because they depend from claim 1, and thus incorporate its limitation.

(2) **Claim 4** recites the limitation of the "sodium chloride" (see claim 4, line 2). There is insufficient antecedent basis for this limitation in the claim because its independent claim 1 recites "chloride ion", not "sodium chloride" (see claim 1, line 6).

(3) **Claim 8** is rejected because it recites the limitation of the aqueous base, which has "a viscosity of 500 mPas or less at 21 s⁻¹ and 25 °C". It is unclear what "21 s⁻¹" means in relation to the viscosity. Therefore, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention and the claim is therefore rendered indefinite.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al. (U. S. Patent Application Publication No. 2005/0031566) and Hohenstein et al. (U. S. Patent No. 6,566,313), and further in view of Tada et al. (U. S. Patent No. 5,750,223).

Applicant Claims

Applicants claim a mousse-foaming personal care composition packaged in an aluminum container, wherein the composition comprises 80-98 % by weight of an

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aqueous base, including (i) at least 30 % of water, (ii) less than 0.16 % of chloride ion, (iii) a pH adjuster, i.e. arginine or citric acid, for maintaining the pH of the aqueous base about 5.0 to 8.0, and 2-20 % by weight of a propellant, i.e. n-butane, iso-butane, propane, or a mixture thereof. Applicants also claim that the personal care composition is contained in an aluminum container that has an inner surface coating of a cured thermosetting resin, i.e. a cured polyamideimide resin.

Determination of the scope and content of the prior art (MPEP 2141.01)

Cooper et al. teach a hair care composition that is formulated into a variety of product, i.e. mousses and shampoo for use in human hair and are packaged and labeled (page 9, [0128]). The composition comprises a cosmetically acceptable carrier, surfactants, propellants, and also a neutralizer to neutralize some acidic groups for promoting solubility and dispersibility (page 9, [0126-0135 and [0167]).

Cooper et al. teach that the suitable surfactants for use in the composition include alkyl betaines, alkyl amidopropyl betaines or alkyl sulphobetaines, and the surfactants are present in an amount of 1-50 % by weight, preferably 1-30 % by weight (page 9, [0126-0127]). Cooper et al. also teach that the carrier of the composition, which is suitable for hair application, is present in an amount from 0.5-99.5 % by weight. Cooper et al. teach that when the composition is a hair mousse, water is preferred as a solvent for the carrier (page 9, [0132], [0134-0135]). In addition, the hair composition can also utilize about 3-

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30 % of a propellant, i.e. propane, n-butane or isobutene, to deliver the hair composition to the hair in the form of foam or mousse (page 9, [0135], lines 5-11 and 18-20).

Cooper et al. further teach that the composition can cover a broad range of viscosities from about 100 cps to about 200,000 cps, and can be delivered using a pressurized aerosol container containing propellant(s) to provide a mousse form of the formulation (page 10, [0138]). In addition, the composition can also be utilized with an aqueous-based single phase liquid solvent, where the viscosity of the composition can be modified by adding additives to the desired form, i.e. mousse, of the product (page 10, [0138], lines 13-18 and [0140], line 3).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

(1) Cooper et al. do not explicitly teach the composition comprising chloride ion and pH adjusting agents. However, these deficiencies are cured by the teaching of Hohenstein et al.

Hohenstein et al. teach a shampoo composition that is formulated to the intrinsic pH of healthy skin or hair for providing the skin or hair with a cosmetically desirable smooth, soft and moisturized feel (column 1, lines 55-63).

Hohenstein et al. teach that the shampoo composition comprises 1-40 % of anion surfactants and, if necessary, a pH adjusting agent. The combination of components is formulated with a carrier, i.e. water, wherein water is present in an amount at least 40 %

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by weight based on the total weight of the composition (column 2, lines 1-5; column 7, lines 53 and 58).

Hohenstein et al. also teach that the shampoo composition is at a pH that is compatible with skin and hair. Preferably, the pH of the shampoo composition is about 4-6, or other pH using common cosmetic ingredients for adjusting the pH. Suitable pH adjusters include acids, i.e. citric acid, for decreasing the pH, or basic amino acids, i.e. arginine, for increasing the pH (column 7, lines 42-58).

Hohenstein et al. further teach that additional additive components, i.e. inorganic electrolyte salts, can also be included in the composition, wherein the inorganic electrolyte salts can be present in an amount up to 2 % by weight. Suitable electrolyte salts, i.e. water soluble alkali metal, preferably sodium chloride, can be used (column 10, lines 2-4 and 7).

In addition, Hohenstein et al. teach that the composition can also comprise an amphoteric or zwitterionic surfactant, i.e. alkyl betaine or alkylamidobetaine (column 7, lines 64-67, and column 8, lines 1-6).

With respect to claim 4, the weight ratio of the cleansing surfactant to chloride ion can be calculated using the amount of the surfactant (1-50 % by weight) and the chloride ion (up to 2 % by weight) present in the composition. For example, when the surfactant is present in an amount of 4.8 % and the chloride ion is present in an amount of 0.16 %, their weight ratio is 30: 1. Likewise, when the surfactant is present in an amount of 48 % and the chloride ion is present in an amount of 0.16 %, their weight ratio is 300:

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1. In addition, when the surfactant is present in an amount of 30 % and the chloride ion is present in an amount of 0.05 %, their weight ratio is 600: 1.

Therefore, the limitation recites in the instant claim 4 for the weight ratio of cleansing surfactant to chloride ion is 30:1, 300:1, or 600:1 is met by the combined teachings of Cooper et al. and Hohenstein et al.

(2) Cooper et al. also do not teach the composition is contained in an aluminum container that has an inner surface coating of a cured polyamideimide resin. However, this deficiency is cured by the teaching of Tada et al.

Tada et al. teach an aerosol metal container, which internal wall is coated with a thermosetting resin that exhibits adhesiveness to a metallic base material of the container. The resin also exhibits inertness to the composition content; therefore, it provides excellent resistance against chemical corrosion (column 1, lines 3-7 and column 2, lines 12-16). Tada et al. teaches that the inner surface-coated metal container made of metal having a cured polyamideimide coating, which is formed from a composition of a polyamideimide resin and a curing agent (column 2, lines 17-20 and 30-32). Tada et al. also teach that the aerosol metal container comprises a mono-block can of aluminum, which is fastened with a valve-holding mounting cup (column 4, lines 27-28 and 38-39).

***Finding of prima facie obviousness Rational and Motivation
(MPEP 2142-2143)***

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It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Cooper et al. and Hohenstein et al., and further in view of Tada et al. to arrive at the instant claimed invention.

(1) One of ordinary skill would have been motivated to utilize a pH adjusting agent to modify the composition's pH resembles to the human skin pH, so that the intrinsic property of the composition, such as a neutral pH value suitably for human skin or hair, would provide the skin or hair with a cosmetically desirable smooth, soft and moisturized feel, and is healthy to the skin or hair. In addition, one of ordinary skill would have been motivated to include other common cosmetic additives, i.e. sodium chloride electrolyte salt, in the composition to further provide conditioning effect for the composition, as taught by Cooper et al. and Hohenstein et al.

(2) One of ordinary skill also would have been motivated to utilize an inner-surface polyamideimide coated metal container to deliver the composition with a reasonable expectation of success because the polyamideimide coated container has an excellent resistance against the corrosion that may be caused by the corrosive sodium chloride salt contained in the composition.

From the teachings of the references, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the combined teachings of the prior art fairly suggests the instant claims, as evidenced by the references, especially in the absence of evidence to the contrary.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al. (U. S. Patent Application Publication No. 2005/0031566), Hohenstein et al. (U. S. Patent No. 6,566,313), and Tada et al. (U. S. Patent No. 5,750,223), and further in view of Peffly M. M. (U. S. Patent No. 5,985,294).

Applicant Claims

Applicants claim a method of preparing a packaged composition that contains a mousse-foaming personal care composition in an aluminum container, wherein the composition comprises 80-98 % by weight of an aqueous base, including (i) at least 30 % of water, (ii) less than 0.16 % of chloride ion, and 2-20 % by weight of a propellant. Applicants also claim that the method comprising the steps of charging the aluminum container with the composition follows by sealing the container, and then adding the propellant.

Determination of the scope and content of the prior art (MPEP 2141.01)

The combined teachings of Cooper et al. and Hohenstein et al., and further in view of Tada et al. have been set forth above. Essentially, Cooper et al. and Hohenstein et al. teach an aqueous base composition comprising water, chloride ion electrolyte and

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propellant, which pH is neutral and is packaged for delivering to hair or skin in the form of a mousse or foam. Tada et al. teach an aerosol metal container, which internal wall is coated with a thermosetting resin that exhibits adhesiveness to the metallic base material of the container. The resin also exhibits inertness to the composition content; therefore, it provides excellent resistance against the chemical corrosion.

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The combined teachings of Cooper et al., Hohenstein et al., and Tada et al. do not teach a method of preparing the packaged composition. However, this deficiency is cured by the teaching of Peffly, M. M.

Peffly, M. M. teaches a personal care composition, especially for hair care, comprising water in an amount of 3 % to 99 % by weight, and a method of preparing the personal care composition into aluminum can. Peffly, M. M. also teaches that the composition components are first pre-mixed and they are then combined under agitation. Afterward, the combined components are placed in a suitable aluminum can with a mousse valve. The valve is sealed to the aluminum can and a vacuum is applied, finally the aluminum can is pressurized with propellant (column 23, Example V: lines 35-40).

***Finding of prima facie obviousness Rational and Motivation
(MPEP 2142-2143)***

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It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Cooper et al. and Hohenstein et al., and in view of Tada et al., and follows the guidance of Peffly, M. M. to arrive at the instant claimed invention.

One of ordinary skill would have been motivated to prepare the packaged composition utilizing the method steps taught in the prior art, namely Peffly, M. M., with a reasonable expectation of success because the method steps, as taught in the prior art, are suitable for preparing a packaged hair product in an aluminum can comprising an aqueous base composition and a propellant.

From the teachings of the references, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the combined teachings of the prior art fairly suggests the instant claims, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

No claims are allowed.

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Contact Information

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616